

## Chapter 6

# Exercising Command and Control

*The great end of [military operations] is not knowledge, but action.*

Paraphrased from T.H. Huxley

This chapter discusses exercising command and control throughout the operations process. Commanders use commander's visualization to assess operations. Staff members use running estimates—developed during planning and continuously updated during preparation and execution—for assessing. Since assessing occurs throughout the operations process, this chapter discusses it in general and then again during the discussions of planning, preparation, and execution. Each commander exercises command and control through a command and control system. Exercising command and control is dynamic and occurs throughout the operations process.

## SECTION I – GENERAL

6-1. Command and control (C2) is execution-focused rather than planning-focused. Modern information systems (INFOSYS) compress planning in three ways:

- They allow near simultaneous parallel planning among echelons.
- They allow collaborative planning among two or more echelons.

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- They provide nearly continuous high quality updates of the common operational picture (COP).

These capabilities permit commanders to direct execution earlier with a less time-intensive but satisfactory plan. Commanders can then adapt actions quicker to new situations as they identify them and fight emerging conditions (enemy actions) rather than fighting the plan. INFOSYS allow a rapid resynchronization of forces and functions that mitigates the potential loss of synchronization caused by changing the plan.

6-2. Operations generally follow the operations process of planning, preparation, execution, and continuous assessment described in FM 3-0. (See figure 1-2 on page 1-8.) These collective activities correspond to the individual operating actions described in FM 22-100. While these activities are cyclical and continuous, they do not necessarily occur sequentially. All activities occur concurrently, with commanders exercising battle command throughout the process. (See figure 6-1.)

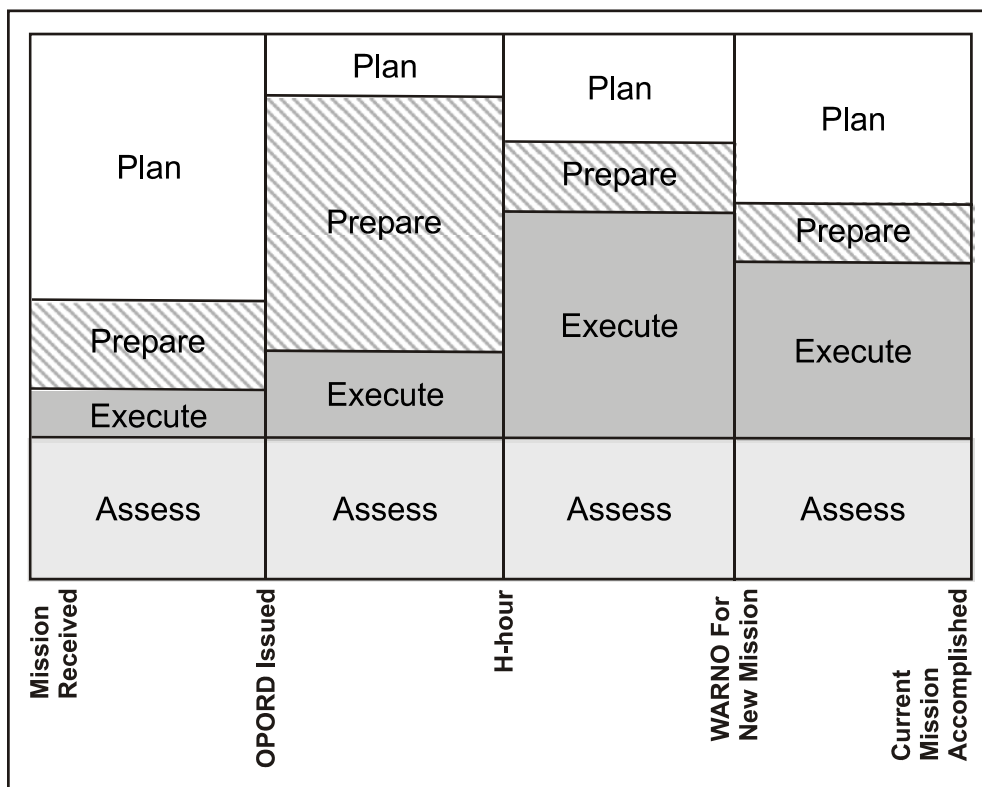


Figure 6-1. Distribution of Operations Process Activities

6-3. Planning is continuous. While preparing for or executing one operation, commanders plan (or refine plans) for branches and sequels to it. They may begin planning for a subsequent operation. Preparation is also continuous whenever a command is not executing an operation. Preparing for a specific operation starts with receiving a warning order (WARNO). It always overlaps with planning and continues through execution for some subordinate units. Assessing is continuous and influences the other three activities. Subordinate

units of the same command may be in different stages of the operations process at any given time.

6-4. Chapter 6 discusses these activities, as well as their supporting topics. (See figure 6-2.) Commanders use visualizing, describing, and directing as their decisionmaking methodology throughout the operations process. (See chapter 4.) Commander's visualization produces an assessment based on the commander's situational understanding. Commanders guide their staffs and subordinates with describing, and direct them to execute actions to implement their decisions. Staff running estimates—developed during planning and continuously updated throughout preparation and execution—provide the basis for assessing and supporting the commander's visualization.

Plan	Prepare	Execute
<ul style="list-style-type: none"> <li>• TLP and MDMP</li> <li>• Orders and plans</li> </ul>	<ul style="list-style-type: none"> <li>• Reconnaissance</li> <li>• Security</li> <li>• Force protection</li> <li>• Revise and refine the plan</li> <li>• Coordination and Liaison</li> <li>• Rehearsals</li> <li>• Task organization</li> <li>• Train</li> <li>• Movement</li> <li>• Precombat checks and inspections</li> <li>• Logistic preparations</li> <li>• Integration of new soldiers and units</li> </ul>	<ul style="list-style-type: none"> <li>• Decide <ul style="list-style-type: none"> <li>▪ Execution</li> <li>▪ Adjustment</li> </ul> </li> <li>• Direct <ul style="list-style-type: none"> <li>▪ Apply combat power</li> <li>▪ Synchronize</li> <li>▪ Maintain continuity</li> </ul> </li> </ul>
<b>Assessment During Planning</b> <ul style="list-style-type: none"> <li>• Monitor the situation</li> <li>• Monitor criteria of success</li> <li>• Evaluate COAs</li> </ul>	<b>Assessment During Preparation</b> <ul style="list-style-type: none"> <li>• Monitor preparations</li> <li>• Evaluate preparations</li> </ul>	<b>Assessment During Execution</b> <ul style="list-style-type: none"> <li>• Monitor operations</li> <li>• Evaluate progress</li> </ul>
<b>Continuous Assessment</b>		
<ul style="list-style-type: none"> <li>• Situational understanding—sources, solutions</li> <li>• Monitoring—situation/operations, criteria of success</li> <li>• Evaluating—forecasting; seize, retain, and exploit the initiative; variances</li> </ul>		

**Figure 6-2. Operations Process Supporting Topics**

6-5. Intelligence is a critical part of C2 throughout the operations process. It provides the first look at the enemy, the environment, enemy courses of action (COAs), and high-value targets for each COA. Intelligence, surveillance, and reconnaissance (ISR) is an integrated concept that contributes to assessment. Staffs synchronize and integrate ISR operations to provide commanders relevant information (RI) about the enemy and environment. This RI from ISR often comes in the form of analytic products (intelligence) at the knowledge level on the cognitive hierarchy. ISR integration begins during planning and continues throughout preparation and execution.

## SECTION II – ASSESSMENT

6-6. *Assessment* is the continuous monitoring—throughout planning, preparation, and execution—of the current situation and progress of an operation and the evaluation of it against criteria of success to make decisions and adjustments (FM 3-0). Commanders and staffs base assessments on their situational understanding. They achieve and maintain situational understanding to identify opportunities for more effective mission accomplishment, threats to the force, and gaps in information.

6-7. Situational understanding during planning forms the basis for commander's visualization. Commanders have situational understanding of the general situation before planning; receiving a mission focuses their attention on a specific purpose. During preparation and execution, situational understanding allows commanders to assess the progress of operations, continuously update their commander's visualization, and make decisions. The commander's critical information requirements (CCIR), continuously updated, set the commander's information management (IM) priorities. They focus the commander's situational understanding on expected decisions. Throughout operations, intelligence provides situation development and battle damage assessment to support assessment and decisionmaking.

6-8. Assessing consists of two tasks:

- Monitoring the current situation and progress of the operation.
- Evaluating the operation against criteria of success.

These tasks take different forms during planning, preparation, and execution. (See figure 6-2, page 6-3.) Together, they allow commanders to assess the situation in terms of expectations and the progress of the plan.

## MONITORING

6-9. *Monitoring* is continuous observation of the common operational picture to identify indicators of opportunities for success, threats to the force, and gaps in information. During planning, commanders and staffs focus their monitoring on facts and assumptions that underlie the plan. They monitor these to ensure they remain valid and to identify new ones that will affect the plan. During preparation and execution, commanders and staffs continue to validate facts and assumptions. However, they focus their monitoring on identifying variances and gaps in RI.

6-10. At lower tactical levels, reports required by standing operating procedures (SOPs) are often adequate for monitoring. Sometimes simple reports or communications through liaison teams are enough. However, the complexity of operations at higher echelons may require a monitoring plan. Synchronization matrixes and decision support templates provide starting points. They show key points of synchronization and events to monitor. The monitoring plan assigns responsibility for monitoring specific actions. Modern INFOSYS allow monitoring to a greater level of detail at higher echelons than before; however, the best monitoring is the least intrusive.

## EVALUATING

6-11. *To evaluate* is to compare relevant information on the situation or operation against criteria of success to determine success or progress. Evaluating allows commanders to identify variances from the plan, including its assumptions, and to forecast trends. It uses RI from the COP to measure, analyze, and report the performance of forces against criteria of success. Staff sections incorporate assessments based on evaluations into running estimates that present recommendations to the commander. The commander considers these recommendations, makes a decision, and directs actions to seize, retain, or exploit the initiative.

6-12. Commanders and staffs continuously evaluate the current and projected situation to determine if changes are necessary to accomplish the mission, better achieve the commander's intent, or protect the force. One aid to evaluation is the following list of questions. These questions may also serve as a basis for constructing or revising the CCIR. However, they must be converted to address the specific situation before they suffice for CCIR. Many answers to these questions can serve as criteria of success:

- Can the force achieve the commander's intent?
- Where is the enemy? Doing what? How?
- Where are friendly forces? Doing what? How?
- What is the posture of the enemy force now? What will it be at the time being considered (for example, an anticipated decision time)?
- Where will the friendly force be at the time being considered?
- What are the enemy's problems? How can we exploit them?
- What are our problems? How can we correct them?
- What are the enemy's opportunities? How can we deny them?
- What are our opportunities? How can we exploit them?
- Are any changes needed to our concept of operations? task organization? mission?

By evaluating the answers to questions such as these, commanders and staffs determine variances and their significance.

## VARIANCES

6-13. A *variance* is a difference between the actual situation during an operation and what the plan forecasted the situation would be at that time or event. (See figure 6-3, page 6-6.) Staffs ensure INFOSYS display RI that allows them to identify variances. When a variance emerges, the commander and staff evaluate it. If necessary, the staff updates its running estimates and recommends a COA to the commander, who directs the necessary action. There are two forms of variances: opportunities and threats.

6-14. **Opportunities.** The first form of variance is an opportunity to accomplish the mission more effectively. Opportunities result from forecasted or unexpected successes. When they recognize an opportunity, commanders alter the plan to exploit it, if they can do so without compromising the plan or incurring unacceptable risk. Exploiting a forecasted opportunity usually involves executing approved branches or sequels. When exploiting an

opportunity, the concept of operations may change, but the commander's intent usually remains the same.

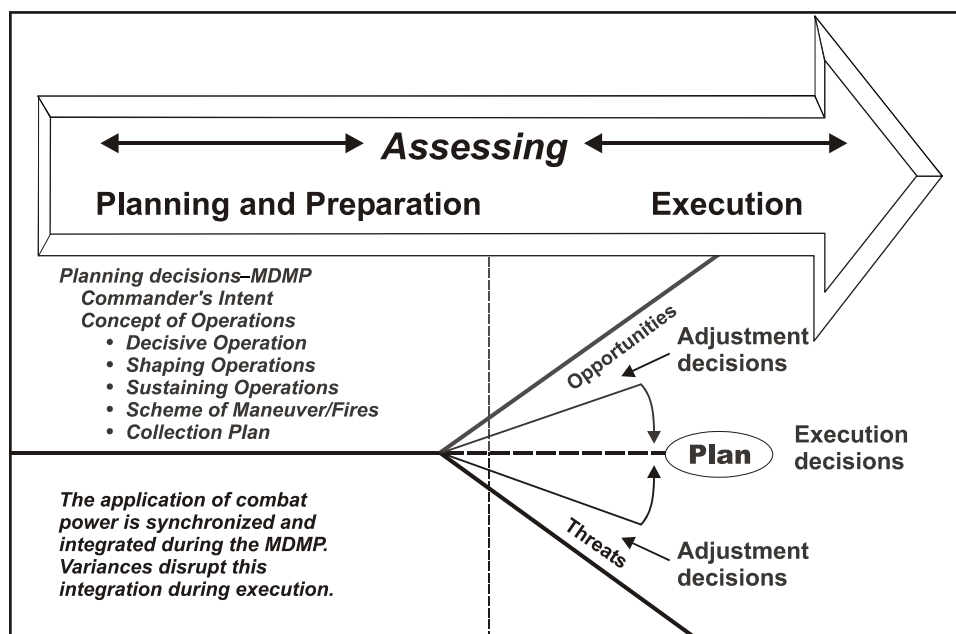


Figure 6-3. Recognition of Variances

6-15. **Threats.** The second form of variance is a threat to mission accomplishment or survival of the force. When a threat is recognized, the commander adjusts the plan to eliminate the enemy advantage, restore the friendly advantage, and regain the initiative.

6-16. Victory in battle requires commanders to recognize and evaluate opportunities and threats—current and projected—in time to direct effective actions that exploit or counter them. Commanders use commander's visualization based on the COP as their primary evaluation method. (See chapter 4.) Staffs use their running estimates, derived from their understanding of the COP, to evaluate the situation. Mission command, with decentralized operations guided by the commander's intent, creates and allows earlier recognition of opportunities and threats. It permits faster reactions than detailed command.

## CRITERIA OF SUCCESS

6-17. *Criteria of success* are information requirements developed during the operations process that measure the degree of success in accomplishing the unit's mission. They are normally expressed as either an explicit evaluation of the present situation or a forecast of the degree of mission accomplishment. Criteria of success may be based on such factors as time lines, distances, loss rates, consumption rates, unit effectiveness, enemy actions, and facts and assumptions. During planning, especially during war-gaming, staffs use them to evaluate COAs. Once the commander approves a COA, the criteria of success serve as a basis to evaluate the progress of operations against the expectations of the plan.

During execution, the criteria of success can, and should, change. They may become CCIR if they affect a projected decision by the commander.

## RUNNING ESTIMATES

6-18. A *running estimate* is a staff estimate, continuously updated based on new information as the operation proceeds. It is a staff technique that supports commander's visualization and decisionmaking. It is also a staff tool for assessing during preparation and execution. In running estimates, staffs continuously update their conclusions and recommendations based on the impact of new facts. The updated conclusions and recommendations make running estimates useful in assessing. Staff sections provide these updated conclusions and recommendations to the commander as required, either by the situation or by the commander.

## TECHNOLOGY AND THE COMMON OPERATIONAL PICTURE

6-19. Technology improves the quality of the COP and makes assessing more accurate than in the past. (See figure 6-4.) Current technology allows commanders to achieve a higher initial level of situational understanding than previously. It allows frequent updates of the COP and helps them retain situational understanding with less degradation. Technology cannot fully answer all questions, but it informs commanders on the gaps that remain. Commanders apply the art of command to fill those gaps with assumptions until they receive the necessary RI.

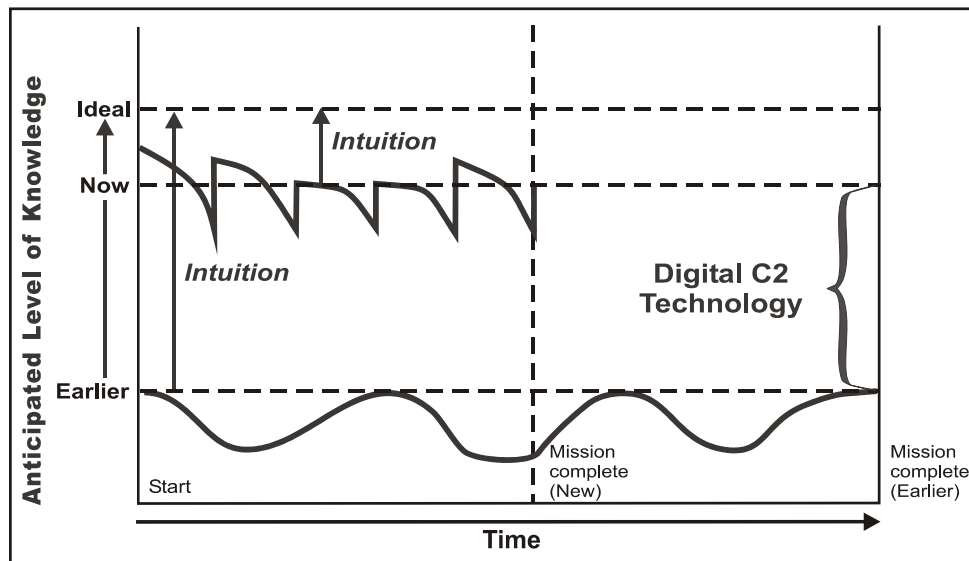


Figure 6-4. Restoring the Common Operational Picture

6-20. Modern INFOSYS support evaluating through automated monitoring of criteria of success, identifying variances, forecasting the magnitude of changes, and comparing performance against expectations. INFOSYS accomplish these tasks faster and with greater precision than analog methods. They allow commanders and staffs to focus on the significance of variances and their implications for success. These capabilities help staffs

maintain running estimates. They also help commanders visualize and anticipate opportunities and threats. Commanders can then direct actions to seize, retain, or exploit the initiative. These actions occur throughout the operations process.

## SEIZE THE INITIATIVE

6-21. Seizing the initiative means setting and dictating the terms of action throughout the operation. Commanders plan to seize the initiative as early as possible. Effective planning determines where, when, and how to do so. However, enemies will actively try to prevent this and disrupt friendly plans. Seizing the initiative requires effective plans to counter enemy efforts. During preparation, commanders set conditions that lead to seizing the initiative and assess their effectiveness. During execution, commanders and staffs recognize and exploit projected opportunities to seize the initiative, and identify or create others.

6-22. During planning, staffs identify criteria of success related to seizing the initiative. They assess them during preparation and execution. Friendly forces may seize the initiative unexpectedly or find unexpected opportunities to seize it. In such cases, well-crafted criteria of success help commanders realize what is happening and choose what COA to direct to exploit the situation.

6-23. Seizing the initiative often requires accepting risk. Commanders and staffs evaluate enemy and friendly actions to determine who has the initiative. They determine what friendly actions will enable friendly forces to retain and exploit the initiative if they have it and seize the initiative if they do not. The following are general indicators that friendly forces have the initiative:

- Friendly forces are no longer decisively engaged or threatened with decisive engagement.
- Subordinate commanders are able to mass combat power or concentrate forces at times and places of their choosing.
- Enemy forces are not offering effective resistance and do not appear capable of reestablishing resistance.
- Friendly forces encounter lighter-than-anticipated enemy resistance or large numbers of prisoners.
- Friendly rates of advance suddenly accelerate or casualty rates suddenly drop.

6-24. Planning for and seizing the initiative are easier during the offense than during the defense, as friendly forces often start with the initiative. However, they must still dictate the terms of action to uncooperative enemies who are trying to seize the initiative. In the defense, enemies usually have the initiative to begin with, and friendly forces must seize it from them. However, defending forces can set the terms of battle or seize the initiative early through shaping operations. Determining how to seize the initiative during stability operations and support operations is difficult, as the adversary is not as clearly evident as in the offense or defense. In these operations, seizing the initiative consists of planning for and applying enough resources to control the situation.



## RETAIN THE INITIATIVE

6-25. Retaining the initiative involves applying unrelenting pressure on the enemy. Commanders do this by synchronizing the BOSs to present enemy commanders with continuously changing combinations of combat power at a tempo they cannot effectively counter. Commanders and staffs use ISR assets to identify enemy attempts to regain the initiative. Effective IM processes this information from ISR operations fast enough to keep commanders inside the enemy's decisionmaking cycle. Combined with effective planning, it helps commanders anticipate key events and likely enemy actions hours or days beforehand and develop branches, sequels, or adjustments to the plan. Properly executed, these create a seamless, uninterrupted series of actions that force enemies to react immediately and do not allow them to regain synchronization. Ideally, these actions present enemies with multiple critical problems that require more resources to solve than they have. As tempo is part of maintaining momentum, the C2 system keeps the operation synchronized at the desired tempo.

## EXPLOIT THE INITIATIVE

6-26. Exploiting the initiative means following through on local successes to realize long-term decisive success. Once friendly forces seize the initiative, they immediately plan to exploit it by conducting continuous operations to accelerate the enemy's complete defeat. This starts the process again, bringing the *observe-orient-decide-act* (OODA) cycle back to the beginning. (See appendix A.) Collaterally, the C2 system identifies disorganization among friendly forces and directs reorganization or reconstitution to restore those forces to combat readiness and to develop options to exploit the initiative.

# SECTION III – PLANNING

6-27. *Planning* is the means by which the commander envisions a desired outcome, lays out effective ways of achieving it, and communicates to his subordinates his vision, intent, and decisions, focusing on the results he expects to achieve (FM 3-0). Assessment during planning focuses on monitoring the current situation, establishing criteria of success, and evaluating COAs. Under mission command, any plan is a framework from which to adapt as the situation requires, not a script to follow to the letter. The measure of a good plan is not whether it transpires as designed but if it facilitates effective action in the face of unforeseen events.

## PLANNING FUNDAMENTALS

6-28. Successful planning is both an art and a science. All planning takes time. The time allocated to planning must not detract from the force generating or maintaining the tempo the commander desires. Planning can be deliberate or hasty.

6-29. *Deliberate planning* involves a detailed, systematic analysis and evaluation of all factors affecting an anticipated operation. It provides insight

into what might occur and takes the time needed to produce an optimal COA. Deliberate planning anticipates future conditions and expects possible execution later.

6-30. *Hasty planning* usually occurs under time-constrained conditions. It considers only critical aspects of the situation. Hasty planning reaches an acceptable COA quickly. Staffs are usually responding to existing conditions when a quick plan is needed for immediate or near-term execution.

6-31. Planning is a dynamic process of interrelated activities rather than a single action. It starts when the commander receives a new mission or derives one from an ongoing operation. It supports decisionmaking by analyzing RI and providing context to develop situational understanding. The outcome of planning is the commander's decision about how to execute the operation, the approved COA. After this decision, planning concludes with orders production. The order may be a formal order or a fragmentary order (FRAGO). It contains coordinating measures, directs preparation activities, allocates or reallocates resources, and dictates timing for execution. Planning continues during preparation and execution, based on information received from continuous assessment. This may include refining the plan, usually in response to updated COP-related information, or creating or refining branches and sequels.

6-32. Deliberate planning facilitates future decisions. It allows assessment of factors that are predictable (such as ammunition expenditures) and unpredictable (such as the effects of weather and terrain). It allows examination of factors not likely to change during the operation (such as certain aspects of supply or transport). It helps staffs examine their assumptions, understand the situation, and anticipate possible enemy actions and friendly counteractions. It can identify mistakes in coordination and synchronization, and allow commanders to prevent them. Finally, it can uncover and clarify potential opportunities, threats, and information gaps.

6-33. Because planning is oriented on the future and the future is always uncertain, planning should not specify future actions with undue precision. Useful plans are flexible and adaptable; they provide opportunity to pursue a variety of options. As planning horizons (see FM 5-0) extend further into the future, plans become less concerned with directing actions and more with identifying options and possibilities. Effective planning projects future actions to retain the initiative and prepare adequately for upcoming operations; however, it should not project them so far out that actual developments make plans obsolete. A key to how far ahead to plan is the ability to discern future enemy actions. If enemy actions cannot be predicted with reasonable certainty, useful plans keep friendly options open until intelligence provides a clearer picture of the enemy or timeliness requires a decision.

6-34. Mission command requires flexible plans that allow commanders to exploit opportunities and respond to threats. Commanders decentralize planning to the lowest possible level, allowing subordinates maximum freedom of action. In general, plans should not be a script establishing specific actions and timetables, either for the command itself or for subordinates. Such scripting severely restricts chances to seize, retain, or exploit the initiative. Rather, a good mission order encourages subordinates to exercise

subordinates' initiative based on the commander's intent and the particulars of each situation. Mission orders prescribe subordinates' actions only to provide for necessary coordination.

6-35. Effective planning requires a sensitive awareness and judicious use of time. Plans should always be completed as soon as possible to maximize subordinates' planning time. Frequent WARNOs and judicious collaborative planning facilitate parallel planning with subordinates. In addition, just because time is available does not mean that orders or plans need to be detailed or lengthy. Good mission orders are as simple as possible and allow subordinates maximum latitude.

6-36. Planning should be collaborative to the extent the situation permits. The main benefits of collaborative planning come as much from engaging meaningfully in the process as from the product itself. While a plan may convey the commander's decision, participating in planning conveys its context and develops an understanding of available options and relationships.

6-37. Planning is an important and valuable C2 activity. However, focusing on the process for its own sake can lead to overcontrol and mechanical thinking. A properly framed commander's intent, effective planning guidance, and judicious participation by commanders create plans that foster mission command. Executing them creates a high tempo that allows maximum opportunity for exercising subordinates' initiative.

## **ASSESSMENT DURING PLANNING**

6-38. During planning, staffs achieve situational understanding based on the COP. From this, they develop and evaluate COAs, and identify opportunities, threats, and gaps in information. Assessing establishes the initial criteria of success for the operation. Commanders and staffs develop these criteria during the COA analysis and use them for COA comparison. (See FM 5-0.) These criteria are then used for evaluating during preparation and execution. IPB is a key tool for assessing the enemy situation and the environment. It begins during planning and continues throughout the operations process. Staffs use running estimates for assessment during planning.

## **PLANNING PROCEDURES**

6-39. The Army uses two procedures to guide planning activities: Troop leading procedures (TLP) and the military decisionmaking process (MDMP). (See FM 5-0.) Leaders at company level and below usually use TLP to guide their planning. The MDMP is more appropriate for units with a staff, usually at battalion through corps level. The two procedures are closely related. Both TLP and the MDMP can be done under unrestricted or time-constrained conditions. More planning time allows better coordinated and synchronized plans; however, it also means less time for subordinates to plan and prepare, and more time for the enemy to prepare and act.

## **ORDERS AND PLANS**

6-40. Both plans and orders represent the commander's visualization for a specific operation. The difference between plans and orders is that plans do

not include an execution time (H-hour). Plans may be executed fully, only in part, or not at all. An order always includes an execution time; for some verbal orders, the execution time is, “now.” (This is an example of positive control. See paragraph 3-95.) Plans and orders may be issued in whole or in part, for planning or for execution. Under Army doctrine, an order is both a plan (representing a design for an anticipated operation, even if immediate) and an order conveying instructions (often for execution of an operation to accomplish a mission). A higher headquarters may disseminate a plan to subordinates with an order to prepare implementing plans based on that plan. A later order may direct execution of the plans.

6-41. Under mission command, commanders direct their subordinates with mission orders. (See paragraphs 1-67–1-80.) Properly prepared mission orders enable subordinates to understand the situation, the commander’s intent, the concept of operations, and their own mission. They leave the “how” of mission accomplishment to subordinate commanders. The commander’s intent provides unity of effort to guide subordinates’ initiative. Mission command stresses that higher commanders state only what is required of subordinates, rather than how to achieve it.

6-42. In practice, no commander relies solely on mission orders. Commanders balance the forms of control based on the nature of the operation or task, the environment, the nature and capabilities of the enemy, and—most important—the qualities of their subordinates, in short, on the factors of METT-TC. Mission orders are preferred for mission command. However, detailed orders may be appropriate when assigning precise, specific tasks of a procedural nature, when the task is not well known, or when time is not a factor. Well-structured C2 systems provide commanders with the RI needed to maintain an accurate situational understanding, which allows them to determine when to assert positive control over a subordinate or a situation. Mission orders allow commanders and subordinates to adapt to changing situations. They are more responsive when time is critical and are less vulnerable to disruption than detailed orders. Mission orders—the more challenging form of control—demand more of leaders at all levels.

6-43. Issuing orders in the command post (CP) allows each staff member to answer questions about the order and helps commanders make refinements. It also helps coordination. However, issuing orders is less than half the work. GEN George S. Patton Jr., commander of Third Army in World War II, counted it only 10 percent, with the other 90 percent focused on preparing and executing operations.

## **SECTION IV – PREPARATION**

6-44. *Preparation* is activities by the unit before execution to improve its ability to conduct the operation including, but not limited to, the following: plan refinement, rehearsals, reconnaissance, coordination, inspections, and movement (FM 3-0). Preparation occurs when a command is not executing an operation. When not executing operations, commanders prepare their forces for them. These preparations include such activities as training and

maintaining personnel and equipment. Preparation for a specific operation starts with receiving a WARNO and ends when execution begins.

6-45. Preparation consists of the following activities, all of which involve actions by staffs, units, and soldiers:

- Assessment.
- Reconnaissance operations.
- Security operations.
- Force protection.
- Revising and refining the plan.
- Coordination and liaison.
- Rehearsals.
- Task organizing.
- Training.
- Troop movement.
- Preoperations checks and inspections.
- Logistic preparations.
- Integrating new soldiers and units.

## ASSESSMENT DURING PREPARATION

6-46. Assessment during preparation involves monitoring the progress of readiness to execute the operation and helps staffs refine plans. It evaluates preparations against criteria of success established during planning to determine variances. It forecasts their significance for the success of the operation. Commanders continue commander's visualization. Staffs continue running estimates begun during planning.

## RECONNAISSANCE OPERATIONS

6-47. During preparation, commanders take every opportunity to improve their situational understanding about the enemy and environment. Commanders integrate reconnaissance missions and surveillance means to form an integrated ISR plan that capitalizes on their different capabilities. Reconnaissance is often the most important part of this activity, providing data that contribute to answering the CCIR. As such, commanders conduct it with the same care as any other operation. They normally initiate reconnaissance operations before completing the plan. In fact, information on which the final plan is based is often gathered by reconnaissance operations executed while the overall command is preparing.

6-48. Commanders direct reconnaissance using the ISR annex to the order. (See FM 5-0.) Commanders consider requesting assistance from sources outside of their control, including long-range surveillance teams and joint assets. They synchronize reconnaissance missions with the other ISR components to continuously update and improve their situational understanding.

6-49. Reconnaissance is not a static, one-time effort that achieves a goal and stops. As reconnaissance forces gather information, the staff modifies the collection plan to account for new information and to redirect ISR efforts. Commanders and staffs continuously review intelligence products and

synchronize their reconnaissance efforts within the ISR plan. They focus on the most important remaining gaps, emphasizing the established or revised CCIR. Commanders balance several factors against their need for RI: the ability of reconnaissance units to gather it, risk to reconnaissance assets during collecting, ability to sustain the reconnaissance effort over time, and requirement to have reconnaissance assets available at critical times and places.

## SECURITY OPERATIONS

6-50. Security operations during preparation prevent surprise and reduce uncertainty through security operations (see FM 3-90), local security, and operations security (OPSEC; see FM 3-13). These are all designed to prevent enemies from discovering the friendly force's plan and to protect the force from unforeseen enemy actions. Security elements direct their main effort toward preventing the enemy from gathering essential elements of friendly information (EEFI). As with reconnaissance, security is a dynamic effort that anticipates and thwarts enemy collection efforts. When successful, security operations provide the force enough time and maneuver space to react to enemy attacks. To accomplish this, staffs coordinate security operations among the units that conduct them and concurrently synchronize them with local unit security.

## FORCE PROTECTION

6-51. *Force protection* consists of those actions taken to prevent or mitigate hostile actions against DOD personnel (to include family members), resources, facilities, and critical information. These actions conserve the force's fighting potential so it can be applied at the decisive time and place and incorporates the coordinated and synchronized offensive and defensive measures to enable the effective employment of the joint force while degrading opportunities for the enemy. Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease (FM 3-0). Force protection employs a combination of active and passive measures to deter, defeat, or mitigate hostile actions against friendly forces. It is not a discrete mission assigned to a single unit, but a continuous process performed by all commands, regardless of their mission, location, or threat. It consists of a broad set of unit-specific, coordinated actions executed to protect the entire force across the range of operations and spectrum of conflict. Commanders and staffs develop and initiate actions during planning, but execute them mainly during preparation and execution. Assessment includes monitoring and evaluating the effectiveness of force protection measures.

## REVISING AND REFINING THE PLAN

6-52. Plans are not static; commanders adjust them based on new information. During preparation, enemies are also acting and the friendly situation is evolving; Assumptions prove true or false. Reconnaissance confirms or denies enemy actions and dispositions. The status of friendly units changes. As these and other aspects of the situation change, commanders determine whether the new information invalidates the plan, requires adjustments to the plan, or validates the plan with no further changes. They adjust the plan

or prepare a new one, if necessary. When deciding whether and how to change the plan, commanders balance the loss of synchronization and coordination caused by a change against the problems produced by executing a plan that no longer fits reality. The higher commander's intent guides their decisionmaking.

## COORDINATION AND LIAISON

6-53. *Coordination* is the action necessary to ensure adequately integrated relationships between separate organizations located in the same area. Coordination may include such matters as fire support, emergency defense measures, area intelligence, and other situations in which coordination is considered necessary (Army-Marine Corps). Coordination takes place continuously throughout operations. Commands do not operate in isolation; they synchronize their actions with those of others. Coordination is essential to this synchronization. It has four objectives:

- Ensure a thorough understanding of the commander's intent as well as subordinates' and supporting forces' roles.
- Ensure all affected and interested personnel have been consulted or informed, as time allows, so they may respond as desired or adjust their plans and actions.
- Avoid conflict and duplication of effort among units, reducing fratricide and expending resources.
- Ensure commanders and staffs consider as many relevant factors as time permits and effectively employ all available assets.

Locations, times, and functions may all require coordination. Coordinating begins during planning. However, a plan alone does not guarantee coordination. Exchanging information is critical to successful coordination.

6-54. During preparation, commands coordinate with higher, lower, adjacent, supporting, and supported units. Coordination includes the following:

- Sending and receiving liaison teams as necessary.
- Establishing communications links that assure continuous contact during execution.
- Exchanging SOPs as needed.
- Synchronizing security and reconnaissance plans to prevent breaks in coverage.

Coordination requirements fall into two categories: external and internal.

6-55. *Internal coordination* occurs within headquarters. It starts activities within and among staff sections that the plan requires to succeed. It ensures staff members remain fully informed of RI affecting their functional responsibilities. During preparation, internal coordination ensures that staffs refine plans based on updated RI. It helps resolve problems of external coordination. Internal coordination also supports subordinate units' preparations by resolving problems, conflicts, and resource allocations.

6-56. *External coordination* includes coordinating with subordinate units, adjacent units, higher headquarters, and supported and supporting units for resources or forces that may not be immediately under the command's control during planning. Places where two headquarters must coordinate their

actions are potential weak points. Enemies may exploit them, or commanders may commit too many or too few resources there. These points include unit boundaries, where unit interdependence may delay execution. The “directed telescope” is an important technique of external coordination because of its information-gathering capability and the ability of the directed telescope to speak for the commander if authorized. (See paragraphs 3-102–3-105.)

6-57. Coordination among forces in noncontiguous areas of operations (AOs) requires special efforts. The headquarters that assigns subordinate units noncontiguous AOs retains responsibility for controlling the area between them. The higher headquarters makes provisions for coordination between subordinate units assigned noncontiguous AOs and those operating in the “white space” between those AOs. In addition, the subordinate units must coordinate with units located in their areas of interest but with which they are not adjacent. Authorization for direct coordination is one common practice in this situation. Exchange of liaison is another. Exercise of initiative during planning is imperative. All concerned must determine whom they may need to communicate with and act to establish the necessary channels.

6-58. Establishing and maintaining liaison is vital to external coordination. Liaison provides a means of direct communications between the sending and receiving headquarters. (See appendix E.) It may begin with planning and continue through preparing and executing, or it may start as late as execution. Available resources and the need for direct contact between sending and receiving headquarters determine when to establish liaison. The earlier liaison is established, the more effective the coordination.

6-59. Graphic control measures are among the most basic means of coordination. (See FM 1-02, FM 3-90.) The “Coordinating Instructions” subparagraph of operation plans and orders lists control measures in written form. (See FM 5-0.) In graphic and written forms, control measures help commanders coordinate forces’ actions geographically, functionally, or chronologically, as well as control individual subordinates’ actions. Written control measures are the most likely source for chronological coordination, although some graphic control measures contain chronological restrictions. The joint force airspace control authority approves all airspace control measures. (See FM 3-52.)

## REHEARSALS

6-60. A *rehearsal* is a session in which a unit or staff practices expected actions to improve performance during execution. (See appendix F.) Rehearsals occur during preparation. They are the commander’s tool; they use them to ensure staffs and subordinates understand the commander’s intent and concept of operations. Rehearsals also synchronize operations at times and places critical to successful mission accomplishment. The extent of rehearsals depends on available time. Rehearsals allow participants in an operation to become familiar with the plan. They also translate the plan into a visual impression that orients them to their environment and to other units that will execute the operation. Effective rehearsals further imprint a mental picture of the sequence of key actions within the operation. Finally, they provide a coordination forum for subordinate and supporting leaders and units.



6-61. Rehearsals contribute to external and internal coordination. They accomplish the following:

- Reveal unidentified external coordination requirements.
- Help synchronize the operation at key points by identifying times and locations requiring coordination, and solutions for coordinating actions.
- Support internal coordination by identifying tasks needed to accomplish external coordination.
- Update internal coordination techniques, such as the synchronization matrix and decision support template.

Even if staff members do not attend a rehearsal, they may still receive taskings for internal coordination.

## TASK ORGANIZING

6-62. *Task organizing* is the process of allocating available assets to subordinate commanders and establishing their command and support relationships (FM 3-0). Receiving commands act to integrate units that are assigned, attached, under operational control (OPCON), or placed in direct support under a task organization. The command directing the task assignment also makes provisions for logistic support. (See FM 5-0 for doctrine on task organizing.)

## TRAINING

6-63. Training develops the teamwork, trust, and mutual understanding that commanders need to exercise mission command and forces need to achieve unity of effort. During repetitive, challenging training, commanders enhance their tactical skills and learn to develop, articulate, and disseminate their commander's intent. They hone command skills during rehearsals, which also help to reinforce their command's common understanding of tactics, techniques, and procedures (TTP).

6-64. Training prepares forces and soldiers to conduct operations according to doctrine and TTP as practiced by the commander. Some training prepares forces for immediate missions. Other training readies them for generic missions or improves their skill in TTP that the commander expects them to use in foreseen missions. The after-action review (AAR) process associated with most Army training allows commanders and forces to review their grasp and practice of TTP doctrinally.

## TROOP MOVEMENT

6-65. *Troop movement* is the movement of troops from one place to another by any available means (FM 3-90). Troop movements to position or reposition units for execution occur during preparation. Commanders integrate OPSEC measures with troop movements to ensure that they do not reveal any intentions to the enemy. (See FM 3-13.) Troop movements include assembly area reconnaissance by advance parties and route reconnaissance.

## PREOPERATION CHECKS AND INSPECTIONS

6-66. Unit preparation includes completing precombat checks and inspections. These ensure that soldiers, units, and systems are as fully capable and ready to execute as time and resources permit. This preparation includes precombat training that readies soldiers and systems to execute the mission.

## LOGISTIC PREPARATION

6-67. Resupplying, maintaining, and issuing special supplies or equipment occurs during preparation. So does any repositioning of logistic assets. In addition, there are many other possible activities. These may include identifying and preparing forward bases, selecting and improving lines of communications, and identifying resources available in the area and making arrangements to acquire them. Commanders direct OPSEC measures to conceal preparations and friendly intentions.

## INTEGRATING NEW SOLDIERS AND UNITS

6-68. Commanders and staffs ensure that new soldiers are assimilated into their units and new units into the force in a posture that allows them to contribute effectively. They also prepare new units and soldiers to perform their roles in the upcoming operation. Integrating includes—

- Receiving and introducing new units and soldiers to the force and environment.
- Exchanging SOPs.
- Orienting them on their places and roles in the force and operation.
- Conducting briefings and rehearsals.
- Establishing C2 over them.
- Establishing communications links.
- Training them on the unit SOP and mission essential tasks for the operation.

## SECTION V – EXECUTION

*Only in very rare cases can an army obtain a complete picture of the enemy's situation before an attack is launched, even when reconnaissance has been detailed and thorough. Wireless silence, misleading information from agents, standing patrols, and defensive screens by land and air, make reconnaissance difficult. Therefore offensive plans must be flexible, and once the attack has begun commanders and troops must be ready to adapt themselves to rapidly changing situations. In principle, estimates of enemy dispositions only hold good until the first clash—as the great von Moltke said,*

*“No plan survives contact with the enemy.”*

MG F.W. von Mellenthin, German Army

6-69. **Execute** means to put a plan into action by applying combat power to accomplish the mission and using situational

understanding to assess progress and make execution and adjustment decisions. Inherent in execution is deciding whether to execute planned actions, such as, phases, branches, and sequels. Execution also includes deciding whether to alter the plan based on changes in the situation. During execution, commanders direct the application of combat power. They synchronize the elements of combat power as much as possible in the time available. Commanders mass effects at decisive points when the time to strike occurs; they do not delay to wait for optimal synchronization. They maintain continuity of operations to prevent enemies from regaining equilibrium. Because the situation changes rapidly, assessment is particularly important during execution.

6-70. During execution, the commander uses the C2 system to assess the situation to determine if progress meets expectations. Based on their assessments, commanders make decisions and put them into action. Commanders use the visualize-describe-direct methodology to assess the situation and make decisions. Staffs support commander's visualization with running estimates.

## EXECUTION FUNDAMENTALS

6-71. Planning and preparation accomplish nothing if the command does not execute effectively. The best plan poorly executed has much less value than an adequate plan well executed. Superior execution effected in a timely manner can compensate for a less-than-adequate plan; a brilliant plan cannot overcome poor execution. Friction and uncertainty, especially enemy actions, dynamically affect plans. An accurate situational understanding that accounts for new realities provides the basis for commanders to exploit opportunities or counter threats.

6-72. Execution entails more than just putting the plan into action. Execution, a continuous process of three activities, follows the OODA cycle. (See figure 6-5.) The activities are—

- Assessing the current situation and forecasting progress of the operation.
- Making execution and adjustment decisions to exploit opportunities or counter threats. (See paragraphs 6-90–6-110.)
- Directing actions to apply combat power at decisive points and times.

Assessment consists of monitoring and evaluating, which closely correspond to the *observe* and *orient* activities of the OODA cycle. Making execution and adjustment decisions corresponds to the *decide* activity. Directing actions to apply combat power corresponds to the *act* activity. (See appendix A.)

6-73. During execution, changes in the situation occur. Some of these result from effective or ineffective actions by enemy or friendly forces; others result from changes in the environment. Successful execution depends on identifying and adapting to these changes. There are two methods for adapting to changes: anticipating and improvising.

6-74. *Anticipating* consists of forecasting changes and developing branches and sequels to address them. Anticipating does not end with planning; it

continues throughout preparation and, especially, execution. Napoleon, who often appeared to have luck on his side, remarked:

*If I always appeared prepared, it is because before entering on an undertaking, I have meditated for long and have foreseen what may occur. It is not genius which reveals to me suddenly and secretly what I should do in circumstances unexpected by others; it is thought and meditation.*

Napoleon's view reinforces the role of anticipation for commanders. Study and development prepare commanders to apply analysis and judgment to achieve situational understanding; establish valid, realistic criteria for decisions; and anticipate events and their consequences.

6-75. *Improvising* consists of acting to counter unforeseen changes. While improvisation is not preferred, situations requiring it frequently arise. The real difference between anticipating and improvising is available time: Anticipation occurs when commanders foresee enemy actions early enough to develop an analytic response. Improvising occurs when enemy actions are unexpected and do not allow time for formal planning.

6-76. During execution, the C2 system continuously manages RI. It compares the COP against the commander's intent, identifies variances, and recommends to the commander solutions for correcting or exploiting the variances. Finally, it prepares and processes execution information that directs actions to exploit unforeseen opportunities and counter enemy actions.

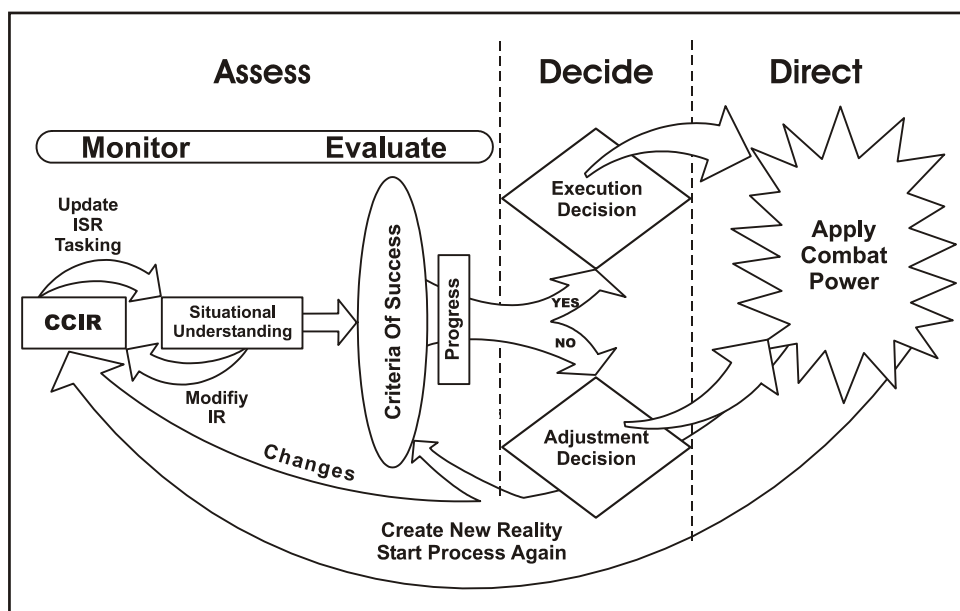


Figure 6-5. Decisionmaking During Execution

## ASSESSMENT DURING EXECUTION

6-77. During execution, continuous assessment is essential. Assessment involves a deliberate comparison of forecasted outcomes to actual events, using the criteria of success to judge operational progress towards success.

Intelligence contributes situation development to assessment during execution. Assessment identifies the magnitude and significance of variances and determines the need for adjustments. The commander and staff assess the probable outcome of the operation to determine whether changes are necessary to accomplish the mission, take advantage of opportunities, or react to unexpected threats. Commanders also assess the probable outcome of current operations in terms of their impact on potential future operations in order to develop concepts for these operations early.

6-78. During execution, commanders use their situational understanding to monitor and evaluate the operation. The most important question when assessing execution is whether the current plan is still valid. Commanders make execution decisions if the plan is still valid. They make adjustment decisions if the situation requires altering the plan. As the commander develops an assessment, he describes his conclusions to the staff and subordinates. After commanders make decisions, the staff transmits the necessary execution information. When necessary, it adjusts the plan—to include adjusting the criteria of success if required. The focus then returns to executing and assessing.

## MONITORING

6-79. Commanders and staffs monitor ongoing operations to determine if they are progressing satisfactorily according to current plans, including any FRAGOs that have modified them. Plans are based on facts and assumptions. Staffs monitor these to ensure they remain valid and to determine new facts and assumptions that affect current and future operations. The criteria of success can, and should, change during execution. These changes often generate new IRs.

6-80. During monitoring, commanders use RI to develop a clear understanding of the command's current situation with respect to the enemy and environment. The staff processes RI and presents the commander as clear an operational picture of the current situation as possible. All staff members must understand the CCIR, including which changes in capabilities and resources (friendly force information requirements [FFIR]) to report to the commander or appropriate staff sections immediately. They must also be able to identify exceptional information. (See paragraphs B-60–B-62.)

## EVALUATING

6-81. Commanders and staffs continuously evaluate the operation in terms of the criteria of success, including forecasted performance, to determine variances and their significance. Determining the significance of variances is necessary to assessing the progress of operations and deciding what to do. Commanders do not view the task of making adjustments as a problem. In any operation, enemies actively try to defeat friendly efforts. Sometimes they make an unexpected move or friendly actions are ineffective. Sometimes the environment changes. In these cases, commanders adjust their plans. These same factors may also present commanders with opportunities to achieve greater success or accomplish objectives beyond those immediately assigned. Staffs continuously update running estimates based on their assessments.

Running estimates supplement and support the commander's visualization. Intelligence contributes battle damage assessment to this evaluation.

6-82. The chief of staff (COS—the executive officer at lower echelons) assists and advises the commander in making adjustments, particularly when the commander is not at the CP. While staff sections at the main CP collect and process RI under the COS's supervision, their products may not always be available to the commander. In these situations, the COS conveys recommended adjustments quickly and accurately to the commander. When the commander makes a decision, the COS supervises the staff activities needed to execute it.

6-83. Evaluation gains time by anticipating future operations and linking them to current operations. Commanders use the answers to certain questions to link current and future operations. Commanders and staffs consciously and continuously pose the following questions and evaluate the answers:

- Is the enemy acting as anticipated? If not, do enemy actions invalidate the current plan?
- Is the friendly force accomplishing the mission at an acceptable cost? If not, what adjustments are required to correct the variances?
- Is the progress of the operation leading to a disposition of friendly forces that can transition effectively to anticipated future operations?
- Has the situation changed so that friendly forces can exploit unanticipated opportunities to achieve the end state more effectively than what the original plan calls for?

These questions check the assumptions, estimates, and planning used in the war game to confirm or adjust plans. The answers help anticipate future operations. Staffs use them to develop COAs for anticipated situations, refine friendly options developed during war-gaming, and disseminate COAs early for parallel and collaborative planning.

6-84. A substantial focus of assessment during execution is on progress, that is, assessing whether individual activities, and the larger operation itself, are progressing according to the criteria of success. Assessing progress determines one of two states:

- The operation or its preparation is progressing satisfactorily or within acceptable variances.
- The operation as a whole, or one or more of its major activities, is not proceeding according to expectations.

6-85. When operations or their preparations are progressing satisfactorily, variances are minor and within acceptable levels. Progress that meets the criteria of success is still relevant to the situation and will result in achieving the commander's intent. Commanders who make this evaluation—explicitly or implicitly—allow operations to continue according to plan. This situation leads to execution decisions included in the plan.

6-86. An assessment may determine that the operation as a whole, or one or more of its major actions, is not progressing according to expectations. Variances of this magnitude present one of two situations:

- Significant, unforeseen opportunities to achieve the commander's intent.
- Significant threats to the operation's success. This situation can result from friendly failures or enemy successes.

In either case, the commander makes an adjustment decision.

## DECIDE

6-87. The commander does not hesitate to modify a plan, or scrap it altogether, if necessary to accomplish the mission, achieve greater success, or save the force. Adhering to a plan when the situation has changed significantly wastes resources and opportunities. Since operations rarely unfold according to plan, the flexibility to adapt to changes is the hallmark of a good tactician. Effective commanders are flexible in their thinking. Their commands are agile enough to execute changes to plans on short notice.

6-88. Commanders at all levels create and nurture flexibility in themselves and their subordinates. This includes preparing to determine when the benefits of adjustments outweigh the costs of disrupting the plan, particularly its synchronization. It also emphasizes taking advantage of unforeseen opportunities, such as shifting the decisive operation to exploit the success of a shaping operation. In addition, commanders prepare for the difficult decisions they may need to make to counter unexpected enemy actions, such as employing the reserve to defeat an enemy counterattack. Effective training incorporates uncertain situations that prepare commanders to make unexpected decisions and prepare their commands to execute them.

6-89. Decisions during execution comprise two basic types:

- Execution decisions.
- Adjustment decisions.

The difference between execution and adjustment decisions lies in whether the plan anticipates the situation requiring a decision. Variances within limits for planned actions (including branches and sequels) require execution decisions. Variances greater than expected require adjustment decisions.

## EXECUTION DECISIONS

6-90. An *execution decision* is the selection, during preparation and execution, of a course of action anticipated by the order. The most basic form of an execution decision is applying resources or activities as outlined in the plan, or within minor deviations from the plan. Other execution decisions involve initiating planned actions and performing critical ongoing functions when they support planned activities.

### Planned Actions

6-91. One form of execution decision is permissive—directing execution of planned actions. This usually requires commanders to recognize that the preconditions for execution have been met. Preconditions may include completing certain tasks or encountering anticipated situations. Executing planned actions includes modifying them to fit the circumstances at the time of execution.

6-92. Branches and sequels are planned actions. Criteria of success used to evaluate progress help identify events that trigger executing branches and sequels.

### Critical Ongoing Functions

6-93. Even if the plan is progressing satisfactorily a command must accomplish certain tasks during execution—the critical ongoing functions. These functions are routine in any operation; however, commanders consciously and continuously consider and, when necessary, direct activities related to them. They also describe aspects of the commander's visualization that apply to them in the form of guidance and priorities. Failure to consider these routine tasks can waste resources, squander opportunities, or even lead to failure. Proper performance of critical ongoing functions helps keep minor variances from becoming obstacles to mission accomplishment. Critical ongoing functions include the following:

- Focus all assets on the decisive operation.
- Conduct continuous ISR and target acquisition.
- Conduct security operations.
- Adjust CCIR based on the situation.
- Adjust graphic control measures.
- Perform battle tracking.
- Employ airspace control measures.
- Continue liaison and coordination.
- Conduct targeting.
- Manage movement and positioning of combat support (CS) and combat service support (CSS) units.
- Perform terrain management.

6-94. **Focus All Assets on the Decisive Operation.** At every stage of an operation, all elements of a command contribute to the decisive operation. Shaping operations focus on setting conditions for it to succeed. Sustaining operations ensure it receives the needed resources and other support. As operations progress, situations may render shaping operations irrelevant or cause sustaining operations to become misdirected. Commanders and staffs continuously monitor all assets. They ensure they are in position and tasked to contribute to the decisive operation or that they are moving to where they can support or facilitate it.

6-95. **Conduct Continuous ISR and Target Acquisition.** ISR is a continuous combined arms effort led by the operations and intelligence staffs in coordination with the battle staff. The priority intelligence requirements (PIRs) drive this ISR effort. Requesting support or performing intelligence-reach answers some requirements. Additionally, broadcast dissemination can ensure intelligence required across the command reaches those who need it. Organic reconnaissance and surveillance assets collect against requirements that no other source can answer or that the commander considers critical.

6-96. Reconnaissance and surveillance assets are never kept in reserve. They are always looking for weaknesses in enemy dispositions and targets. When the force engages the enemy, reconnaissance and surveillance assets operate



on the flanks, looking beyond the area of close combat and seeking opportunities to exploit. This does not mean that ISR assets never rest, maintain, or train. Commanders phase or sequence ISR operations to ensure that assets are available when needed and required coverage is maintained. They continue to synchronize the efforts of all assets through dynamic retasking and changes to the integrated ISR plan.

**6-97. Conduct Security Operations.** Security missions are associated with many operations. Once they complete these missions, security forces hand off the fight to the main body. However, commanders always look beyond the specific security missions. They continually assess the command's security posture and update the EEFI to fit the situation. (See FM 3-13.) Commanders cover open flanks and gaps between units with some form of security. This security may take the form of a security operation (screen, guard, or cover). (See FM 3-90.) Or it may involve placing and monitoring an ISR system able to detect enemy absence or presence and provide adequate warning.

**6-98. Adjust CCIR Based on the Situation.** Commanders and staffs continuously review CCIR throughout an operation. They analyze IRs against the mission and current commander's intent to identify IRs that directly affect projected decisionmaking by the commander. These are recommended to or selected by the commander as new CCIR. As CCIR are answered or the situation changes, commanders establish and disseminate new CCIR. Staffs allocate assets to collect against the new CCIR.

**6-99. Adjust Graphic Control Measures.** Full integration of forces and systems requires changing graphic control measures anytime there is significant movement of forces (including special operations forces activities). Commanders adjust graphic control measures to provide as much flexibility as possible for all BOSs. For example, during a delay, the fire support coordination line (FSCL) moves back as friendly forces move to the rear. In offensive operations, the FSCL moves forward as friendly forces advance. Commanders use graphic control measures sparingly and for the shortest time necessary. For example, commanders cancel no-fire areas once the circumstances that required them have passed. (See FM 1-02, FM 3-07, FM 3-90.)

**6-100. Perform Battle Tracking.** Battle tracking involves monitoring elements of the COP that are tied to the criteria of success. Battle tracking requires special attention by all staff members. The operations officer continuously monitors the progress of air and ground movement and expeditiously recommends changes as required.

**6-101. Employ Airspace Control Measures.** Airspace control measures (ACMs) are a major procedural means of Army airspace command and control (A2C2). (See FM 3-52.) They are closely associated with graphic control measures and battle tracking. ACMs concern all forces, not just Army aviation, air defense, and fire support forces. (See FM 3-07, FM 3-90.) All commanders and staffs remain aware of current ACMs and their integration with and effects on ground operations. They also consider the effects of ground operations on ACMs and adjust them as needed. For example, repositioning Army rocket and missile systems requires ACM adjustments.

**6-102. Continue Liaison and Coordination.** Internal coordination continues because friction within friendly forces and actions by enemy forces

affect a plan's execution. Staffs and (especially at lower echelons) commanders coordinate execution and adjustment decisions internally and externally to keep operations synchronized.

6-103. Situational understanding includes knowing the location of adjacent, higher, subordinate, supporting, and supported units, and what they are doing. It also includes knowing intelligence sources and how gaps between units are secured or monitored. Maintaining this knowledge requires reliable communications, liaison, and coordination. The CCIR may include any significant changes in the situation of adjacent units. When these occur, commanders evaluate their effect on operations, decide if they matter, and direct the necessary actions.

6-104. Commanders establish positive controls (normally periodic reports) to ensure that any loss of communications is immediately identified. They report any loss of required communications to higher headquarters and act to reestablish them. Doctrinal procedures prescribe who is responsible for establishing contact (left to right, higher to lower, rear to front, and supported to supporting). However, when communications are lost, all elements seek to regain them.

6-105. **Conduct Targeting.** Targeting is a logical process that synchronizes lethal and nonlethal fires with the effects of other BOSs. (See FM 6-20-10.) Nonlethal fires include offensive information operations effects. (See FM 3-13.) The targeting team performs targeting functions for the commander. The targeting meeting is the primary targeting forum.

6-106. During execution, the targeting team continually assesses the current situation, tracks decision points, and plans and prepares for engagement of future targets. (Targeting teams look 6, 24, 72, or more hours out, depending on the echelon and situation.) Intelligence provides target development and other support to targeting. The targeting meeting focuses and synchronizes the command's combat power and resources toward finding, tracking, attacking, and assessing high-payoff targets (HPTs). The meeting—

- Verifies and updates the high-payoff target list.
- Verifies, updates, and retasks ISR assets for each HPT.
- Allocates delivery systems to engage targets.
- Confirms that ISR assets are tasked to verify effects on targets.
- Nominates targets for attack by joint systems.
- Synchronizes lethal and nonlethal fires (including information operations).

The targeting meeting provides a forum to resynchronize target engagements when the commander makes execution and adjustment decisions.

6-107. **Manage Movement and Positioning of Combat Support and Combat Service Support Units.** Any operation focuses on massing the effects of combat power at the decisive point of the decisive operation. This requires maneuvering not only combat forces but also CS and CSS forces. Commanders and staffs determine where to mass effects and direct movements early enough to position all forces, including CS and CSS, to accomplish that task. They plan CS and CSS to shaping operations so as not to interfere with support to the decisive operations.

6-108. During execution, it is easy to lose sight of the time required to reposition assets. Moving CS and CSS units during movements to contact, exploitations, and pursuits is particularly important. Staffs include these units in the movement formation and track their locations. Maneuver units must not outrun critical supporting units. Staff elements remain aware of the time required to move assets for which they have functional responsibility. They initiate movement in time to get them to the right place at the right time. They allow enough time to account for the friction accompanying moves during operations.

6-109. Perform Terrain Management. Headquarters deconflict land use within their AOs. They track the location and land use of all units. Effective terrain management ensures that adequate space, including routes, is available at the right time to support critical activities, especially the decisive operation. Staffs reverse-plan to determine which units require what space at what time. They give priority to those executing and supporting the decisive operation. They ensure that space is available when those units need it.

## ADJUSTMENT DECISIONS

6-110. An *adjustment decision* is the selection of a course of action that modifies the order to respond to unanticipated opportunities or threats. Commanders make adjustment decisions during preparation and execution. When the commander makes an adjustment decision, it normally requires resynchronizing operations across the BOSs. The commander may have to describe the commander's visualization that underlies the adjustment decision with guidance on the critical ongoing functions. Staff members take necessary actions within their functional responsibilities to execute the decision. Collectively, these actions resynchronize the BOSs. Commanders pay particular attention to the effects of adjustment decisions on targeting. They give enough guidance to continue the targeting process. Adjustments may take one of three forms:

- Reallocating resources.
- Changing the concept of operations.
- Changing the mission.

### Reallocating Resources

6-111. The simplest adjustment is reallocating resources. This normally provides additional assets to the decisive operation; however, some situations may require reinforcing a shaping operation. Commanders can allocate additional CS, such as artillery, or reinforce with additional combat units. Commanders avoid reinforcing a failing effort. If an operation is failing, the commander does not strengthen it without a clear indication that additional resources will result in success. On the other hand, commanders reinforce success if it creates opportunities for more success.

### Changing the Concept of Operations

6-112. Changing the concept of operations adjusts the way the force executes the operation without changing the mission. Most often, this adjustment involves designating a different operation as the decisive operation. Commanders normally do this to exploit an unplanned opportunity or counter an

unexpected threat. When the decisive operation is unsuccessful (or less successful than planned), the commander designates a more successful shaping operation as the decisive operation.

6-113. A shaping operation may achieve significant success beyond that anticipated. In that situation, the commander may shift the decisive operation to it, if that is possible within the higher commander's intent. However, commanders do this only if it accomplishes the mission in a manner superior to that of the original plan. Commanders may also shift the decisive operation if unanticipated enemy actions threaten to defeat the operation. When shifting the decisive operation, commanders also shift all priorities of support and all available CS and CSS to the new decisive operation.

6-114. Among the most important adjustment decisions are those concerning the reserve: the number and type of forces to allocate to it, and when and where to commit it. Employing reserves successfully requires anticipation. Anticipation helps commanders task organize, position, and move reserves in a way that minimizes loss of momentum on their commitment. When the reserve is committed, the commander designates another force as a new reserve.

### Changing the Mission

6-115. When reallocating resources or changing the concept of operations does not resolve a problem hampering mission accomplishment, the commander may have to change the mission. Commanders do this only as a last resort, and the new mission must still accomplish the higher commander's intent. Of the three adjustment decisions, this one presents the greatest difficulties in resynchronizing the force's operations with those of the overall force.

### ADJUSTMENT DECISION METHODS

6-116. Methods for making adjustment decisions fall along the continuum shown in figure 6-6. The key factor commanders consider when selecting a decisionmaking method is the time available to make a decision and initiate action. Figure 6-6 shows other important factors. As underlying factors push the method further to the intuitive side of the continuum, at some point the MDMP methodology no longer applies. However, the context provided by the order—which was developed using the MDMP—allows commanders to make adjustments, even major ones, without having to redo the entire order.

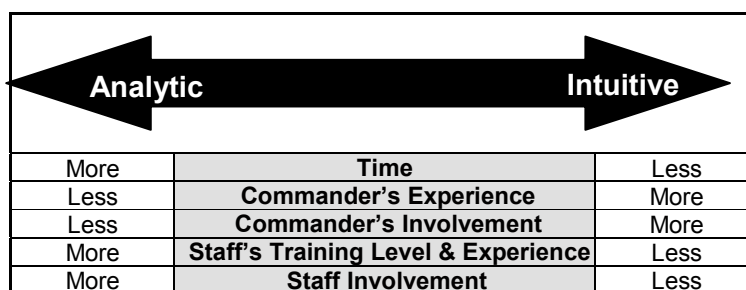


Figure 6-6. Adjustment Decision Methods

6-117. Adjustment decisions in novel or complex situations should be as analytic as time allows. Commanders follow the MDMP, modifying selected steps to fit the situation and available time. (See FM 5-0.) Time-constrained conditions require more intuitive decisionmaking techniques. Commanders use the focused COA technique when there is not enough time for thorough analysis. They use the recognition technique when a satisfactory solution is so obvious that rigorous analysis is not required.

### Focused COA

6-118. The focused COA technique depends heavily on the commander's situational understanding. It starts with the commander visualizing and mentally war-gaming COAs until he finds one that appears to solve the problem. The staff then analyzes the COA and refines it into an order. The commander solves inadequacies detected during analysis by revising or modifying the COA rather than developing alternative COAs.

### Recognition

6-119. Commanders reach recognition decisions when they can determine an acceptable solution immediately, with little or no analysis. The recognition decision technique is the most common decisionmaking technique used during execution of fast-paced operations. Commanders make dozens of decisions during execution. Most are recognition decisions.

6-120. Recognition decisions are not MDMP-based; however, they are grounded in IPB, estimates, and the order that initiated the operation. They result from intuitive decisionmaking. Recognition decisions are appropriate when—

- There is little or no time available for deliberation.
- Significant progress problems require an immediate solution.
- The situation and reasons for the lack of progress are clear.
- A single, acceptable solution is obvious to the commander.

A recognition decision produces an acceptable solution based on the commander's situational understanding and assessment of the significance of variances. Commanders determine and refine an acceptable solution mentally instead of analyzing multiple options to determine the optimal one.

6-121. The recognition decision technique requires an experienced decision-maker. It requires the least staff involvement before the decision, but a great deal of staff action afterwards. The coordinating and synchronizing activities that occur before the commander's decision under analytic decisionmaking must be accomplished after the commander makes a recognition decision. The staff resynchronizes the operation as much as possible through coordination, issuing FRAGOs as needed.

### DIRECT

6-122. Land forces do not respond to a decision until directed to do so. Subordinates then perform their own decisionmaking and direct actions by their forces. Any change to a plan requires changes in applying combat power and resynchronization to mass effects. In addition, staffs ensure continuity of the

operation. Figure 6-7 summarizes the range of possible actions with respect to decisions made during execution.

Type Decision	Situation	Action
Execution	<b>Minor Variances from the Plan</b> Operation proceeding according to plan. Variances are within acceptable limits.	<b>Execute Planned Actions</b> <ul style="list-style-type: none"> <li>• Commander or designee decides which planned actions best meet situation and directs their execution.</li> <li>• Staff completes follow-up actions.</li> <li>• Decision may be permissive.</li> <li>• FRAGO not normally issued.</li> </ul>
	<b>Anticipated Situation</b> Operation encountering variances within the limits for one or more sequels.	<b>Execute a Branch or Sequel</b> <ul style="list-style-type: none"> <li>• Commander or staff review branch/sequel plan.</li> <li>• Commander receives assessments and recommendations for modifications to the plan, determines the time available to refine it, and either issues guidance for further actions or directs execution of a branch/sequel.</li> <li>• Staff issues FRAGO.</li> <li>• Staff completes follow-up actions.</li> </ul>
Adjustment	<b>Unanticipated Situation—Friendly Success</b> Significant unanticipated positive variances result in opportunities to achieve the end state in ways that differ significantly from the plan.	<b>Make an Adjustment Decision</b> <ul style="list-style-type: none"> <li>• Commander recognizes threat/opportunity and determines time available for decisionmaking.</li> <li>• Commander selects a decisionmaking method. If there is not enough time for a complete MDMP, the commander directs the staff to refine a single COA or directs actions by subordinates to counter the threat/exploit opportunity and exercise initiative within the higher commander's intent.</li> <li>• Commander normally does not attempt to restore the plan.</li> <li>• Commander issues a verbal WARNO or FRAGO to subordinate commanders.</li> <li>• Staff resynchronizes operation, modifies the criteria of success, and begins assessing operations for progress using the new criteria of success.</li> </ul>
	<b>Unanticipated Situation—Enemy Threat</b> Significant, unanticipated negative variances impede mission accomplishment.	

Figure 6-7. Decision Types and Related Actions

## APPLY COMBAT POWER

6-123. To implement execution or adjustment decisions, commanders direct actions that apply combat power. The normal means of doing this during execution is the FRAGO. Modern INFOSYS enable a C2 system to automate production of orders and associated graphics for dissemination, especially for execution decisions that use data already stored in a common database.

## SYNCHRONIZE OPERATIONS

6-124. After the commander makes an execution or adjustment decision, the staff resynchronizes the operation to mass the maximum effects of combat power on the enemy and seize, retain, and exploit the initiative. This involves synchronizing the operation in time, space, and purpose across all BOSs. Individual staff sections and subordinate and supporting forces keep each other informed and integrate and deconflict their actions to reduce duplication, confusion, and problems.

6-125. In particular, the staff applies the commander's directions to the targeting process. (See FM 6-20-10.) At lower echelons, the targeting process serves as a synchronization tool. The targeting team reviews the appropriate targeting products and makes any changes necessary to support the commander's decision. The staff obtains the commander's approval of any changes to targeting recommendations. It then prepares FRAGOs for subordinate units with new targeting-related tasks and essential fire support tasks, and rehearses if time permits. It tracks targeting actions with the products (such as the target synchronization matrix) the command uses.

6-126. Modern INFOSYS can reduce the difficulties of resynchronizing operations after an adjustment decision by adjusting supporting plans through automation. Synchronization is not an end in itself. Excessive concern with synchronization can waste resources and opportunities. Synchronization should be pursued only to the extent required to assure success and not at the expense of speed and flexibility. Often speed of execution will generate more combat power than detailed synchronization.

## MAINTAIN CONTINUITY OF OPERATIONS

6-127. To maintain continuity of operations, commanders and staffs follow these tenets:

- Make the fewest changes possible.
- Facilitate future operations.

6-128. Commanders make only those changes to the plan needed to correct variances. They keep as much of the current plan the same as possible. That presents subordinates with the fewest possible changes. The fewer the changes, the less resynchronization needed, and the greater the chance that the changes will be executed successfully.

6-129. Whenever possible, commanders ensure that changes do not preclude options for future operations. Normally this tenet applies only to higher echelons with organic planning capabilities.

6-130. Figure 6-8 (page 6-32) shows a concept for adjusting or planning future operations. Using it requires staffs to develop options during planning or commanders to infer them based on their assessment of the current situation. It depends on validating earlier assumptions and updating planning factors and staff estimates. The concept of future operations may be war-gamed using updated planning factors, running estimates, and assumptions. Commanders project the situation in time, visualize the flow of battle, and project the outcomes of future engagements. Decisionmaking during operations is continuous, not a discrete event. Commanders balance

priorities carefully between current and future operations. They seek to accomplish the mission efficiently, while conserving as many resources as possible for future operations. Achieving this balance—while remembering that soldiers' lives are the most important resource—is a major aspect of the art of command.

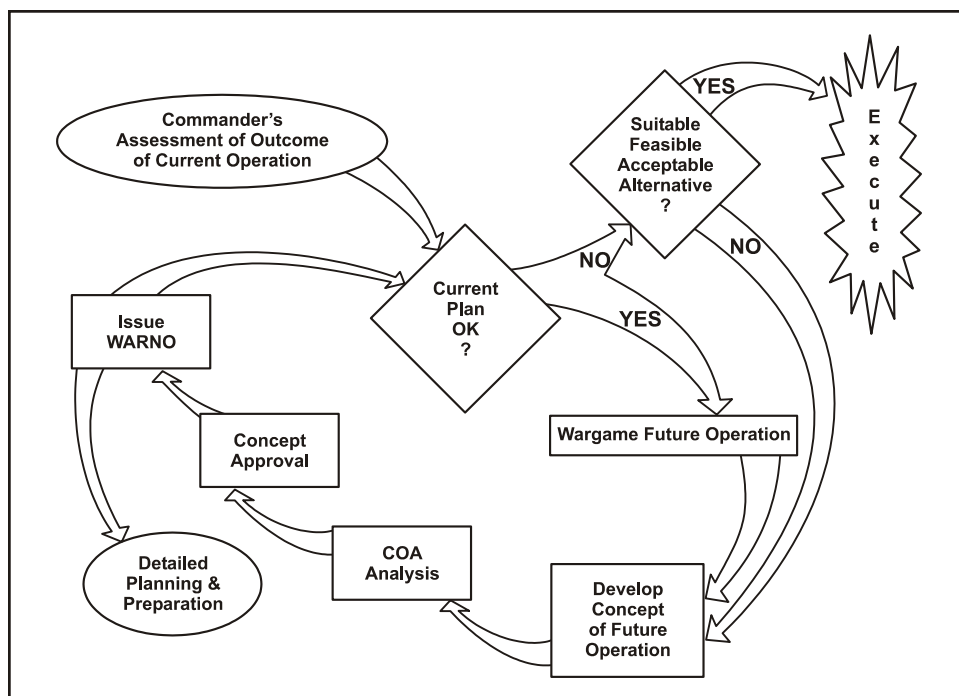


Figure 6-8. Planning Future Operations

## SECTION VI – CONCLUSION

6-131. C2 doctrine establishes a framework for commanders to use to exercise effective C2 during operations. The key to exercising effective C2 lies in the commander's ability to make effective decisions and direct actions to mass the effects of combat power at decisive points. The C2 system supports the commander by providing COP-related information that sustains the commander's situational understanding, by developing products supporting his decisionmaking, and by preparing and disseminating execution information to implement his decisions. Staffs process information into input to the COP and running estimates, which recommend COAs for decisions commanders must make. Commanders determine whether execution or adjustment decisions are needed by monitoring the situation and assessing the significance of variances. When time permits, commanders make analytic decisions based on staff analyses. Under time-constrained conditions, they adapt analytic decisionmaking methods to the situation, making intuitive decisions as needed. The heart of C2 is the commander. All C2 processes exist to provide the commander with the RI needed to make decisions at the appropriate times and place to accomplish the mission.